

PATENT APPLICATION

Sheet 1 of 5

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| FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) | ATTY. DOCKET NO. 10010538-1 | SERIAL NO. 09/823,195 (Filed Herewith) |
| | APPLICANT Xiao-An Zhang et al | |
| | FILING DATE 3/29/01 (Filed Herewith) | GROUP 2825 |

REFERENCE DESIGNATION U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS |
|------------------|----|-----------------|-----------|--------------|-------|-----------|
| <i>CME</i> | 1A | 6,128,214 | 10/3/2000 | Kuekes et al | 365 | 151 |
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

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|------------|----|---|
| <i>CME</i> | 1Q | U.S. Patent Application, Serial No.: 09/280,048 entitled "Chemically Synthesized and Assembled Electronic Devices", filed on March 29, 1999 |
| <i>CME</i> | 1R | U.S. Patent Application, Serial No.: 09/280,225 entitled "Molecular Wire Crossbar Interconnects for Signal Routing and Communications", filed on March 29, 1999 |
| <i>CME</i> | 1S | U.S. Patent Application, Serial No.: 09/282,045 entitled "Molecular Wire Crossbar Logic", filed on March 29, 1999 |

EXAMINER

C. Lambert

DATE CONSIDERED

11/5/04
 11040 U.S. PTO
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 03/29/01

PATENT APPLICATION

Sheet 2 of 5

FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION DISCLOSURE
STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

10010538-1

SERIAL NO.

09/823,195
(Filed herewith)

APPLICANT

Xiao-An Zhang et al

FILING DATE

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|------------|----|---|
| <i>CME</i> | 2Q | U.S. Patent Application, Serial No.: 09/282,049 entitled "Demultiplexer for a Molecular Wire Crossbar Network", filed on March 29, 1999 |
| <i>CME</i> | 2R | U.S. Patent Application, Serial No.: 09/280,188 entitled "Molecular Wire Transistors" filed on March 29, 1999 |
| <i>CME</i> | 2S | C.P. Collier et al, "Electronically Configurable Molecular-Based Logic Gates", Science, Vol. 285, pp. 391-394 (16 July 1999) |

EXAMINER

C. J. J. J.

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Sheet 3 of 5

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

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|-----|----|--|
| CME | 3Q | C.P. Collier et al, "A [2]Catenane-Based Solid State Electronically Reconfigurable Switch", Science, Vol. 289, pp. 1172-1175 (18 August 1000) |
| CME | 3R | A.M. Morales et al, "A laser ablation method for the synthesis of crystalline semiconductor nanowires", Science, Vol. 279, pp. 208-211 (Jan. 9, 1998) |
| CME | 3S | J.R. Heath et al, "A liquid solution synthesis of single crystal germanium quantum wires", Chemical Physics Letters, Vol. 208, pp. 263-268 (June 11, 1993) |

EXAMINER

C. J. Luchini

DATE CONSIDERED

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| FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) | ATTY. DOCKET NO. 10010538-1 | SERIAL NO. 09/823/95 (Filed Herewith) |
| | APPLICANT Xiao-An Zhang et al | |
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| | | |
|------------|----|---|
| <i>CME</i> | 4Q | V.P. Menon et al, "Fabrication and Evaluation of Nano-electrode Ensembles", Analytical Chemistry, Vol. 67, pp. 1920-1928 (July 1, 1995) |
| <i>CME</i> | 4R | T. Vossmeier et al, "Combinatorial approaches toward patterning nanocrystals", Journal of Applied Physics, Vol. 84, pp. 3664-3670 (Oct. 1, 1998) |
| <i>CME</i> | 4S | D.V. Leff et al, "Thermodynamic Control of Gold Nanocrystal Size: Experiment and Theory", The Journal of Physical Chemistry, Vol. 99, pp. 7036-7041 (May 4, 1995) |

EXAMINER

C. Juehart

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| FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) | ATTY. DOCKET NO. 10010538-1 | SERIAL NO. <i>09/823,190</i> (Filed Herewith) |
| APPLICANT Xiao-An Zhang et al | | |
| FILING DATE <i>3/29/01</i> (Filed Herewith) | | GROUP |

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

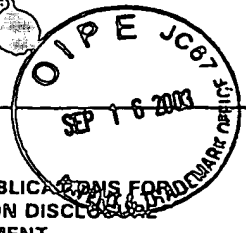
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| <i>Come</i> | 5Q | J.D.L. Holloway et al, "Electron-transfer reactions of metallocenes: Influence of metal oxidation state on structure and reactivity", Journal of the American Chemical Society, Vol. 101, pp. 2038-2044 (April 11, 1979) |
| <i>Come</i> | 5R | C.P. Collier et al, "Electronically Configurable Molecular-Based Logic Gates", Science, Vol. 285, pp. 391-394 (16 July 1999) |
| | 5S | |

EXAMINER

C. J. J. J.

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PATENT APPLICATION
Sheet 1 of 2

FORM PTO-1449

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(Use several sheets if necessary)

ATTY. DOCKET NO.
10010538-1

APPLICATION NO.
09/823,195

CONFIRMATION NO.
1230

APPLICANT

Sean Xiao-An Zhang et al

FILING DATE

Mar 29 2001

GROUP

2825

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NUMBER | PUBLICATION DATE | NAME | Pages, Columns, Lines Where Relevant Passages or Figures Appear |
|---------------------|----|--------------------|---------------------|--------------|--|
| CME | 1A | 4,180656 | 25 Dec 1979 | Garner | — |
| CME | 1B | 6,128,214 | 3 Oct 2000 | Kuekes et al | — |
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| | | DOCUMENT NUMBER | PUBLICATION DATE | NAME OF PATENTEE OR APPLICANT | Pages/Columns/Lines Where Relevant Passages/Figures Appear | Check if Translation attached |
|-----|----|--------------------|---------------------|----------------------------------|---|-------------------------------------|
| CME | 1L | WO02089229 | 7 Nov 2002 | Hewlett Packard Co. | — | |
| CME | 1M | WO03016992 | 27 Feb 2003 | Hewlett Packard Co. | — | |
| CME | 1N | WO9835271 | 13 Aug 1998 | IBM Corp. | — | |
| | 1O | | | | | |
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

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|-----|----|---|
| CME | 1Q | Roth et al: "Molecular Rectifiers and Transistors based on PI-conjugated materials "Synthetic Metals, Elsevier Sequoia, Lausanne, Ch vol 94 no. 1, 1998 pages 105-110 XP001004861 |
| CME | 1R | Ward M D: "Current Development in Molecular Switches" Chemistry and Industry. Chemistry and Industry Review, Chemical Society Letchworth, GB no. 16, 18 August 1997 pages 640-645 XP00659773 |
| CME | 1S | Shimizu: " Molecular Switch and Memory for Organic Electronic Matherials" Sen' I Kobunshi Zaiyo Kenkyujo Kenkyu Hokoku-Bulletin of the Research Institute for Polymers and Textiles, Kogyogijutsuin. Sen' I Kobunshi Zaiyo Kenkyujo, Tsukuba, JP no. 141, 1984 pages 21-40 XPO001145548 |

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C. Swerhart

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Sheet 2 of 2

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

| | | |
|-----|----|--|
| CME | 2Q | Hutchison K A et al: "Chiropticsenses: Molecular Chiroptical Dipole Switches for Optical Data Storage" Proceedings of the SPIE, SPIE, Bellingham, VA, US vol 3937, 2000 pages 64-72 XP009005995 |
| CME | 2R | Database CA 'Online Chemical Abstracts Services, Columbus, OH, US; Riesz, E: "Some new benzothiazole derivative sand comparison dyeing with such compounds" retrieved from STN XP-002243303 |
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C. Juerker

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